Russian Journal of General Chemistry 2006 vol.76 N2, pages 202-205

Synthesis, transport and ionophore properties of α,ω-diphosphorylated aza podands: III. Liquid ion-selective electrodes based on phosphorylated aza podands

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Abstract

Aza podands having side α-aminomethylphosphine oxide groups were prepared and used as electrode-active agents in liquid membrane ion-selective electrodes. A series of liqiud membrane electrodes sensitive to Cu2+ and Hg2+ cations were prepared on the basis of N,N-bis[di(n-hexyl) phosphorylmethyl]piperazine. The electrodes containing copper complexes with aza podands as ionophores exhibit anionic function toward lipophilic anions. Potentiometric and argentometric determination of iodide ions was performed with an iodide-selective electrode based on the mercury complex. © Pleiades Publishing, Inc., 2006.

http://dx.doi.org/10.1134/S107036320602006X